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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/800,444
Filing Date: March 15, 2004
Appellant(s): CHU ET AL.

Charles A. Bieneman
For Appellant

EXAMINER'S ANSWER

SUPPLEMENTAL EXAMINER'S ANSWER

In view of further consideration by Technology Center 3600, a Supplemental Examiner's Answer including new grounds of rejection under 35 U.S.C. 101 is hereby issued.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows: On page 20 of the Appeal Brief, item 14 states, "Whether claim 25 is unpatentable under 35 USC § 103(a) over Soulanille in view of bates and further in view of Littlefield." In fact, claim 25 is rejected over Soulanille in view of Bates, and further in view of Singh, not Littlefield.

Item 15 states, "Whether claim 32 is unpatentable under 35 § 103(a) in vie of Bates and further in view of Schena." In fact, the rejection of claim 32 is based on Soulanille in view of Bates, and further in view of Mangold, not Schena. (There is also a

rejection of claim 32 based on Soulanille in view of Bates and further in view of Acres, as Appellant correctly notes in item 16.)

NEW GROUND(S) OF REJECTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on the instant application, paragraphs 153-155 and 195 in particular, the "system" of claims 1-37 can reasonably be interpreted as pure software, and software per se is not a process, machine, manufacture, or composition of matter, and therefore not patentable.

Claim 48 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on the instant application, paragraphs 153-155 and 195 in particular, the "system" of claim 48 can reasonably be interpreted as pure software, and software per se is not a process, machine, manufacture, or composition of matter, and therefore not patentable.

Claims 49-56 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v.

Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972);
Cochrane v. Deener, 94 U.S. 780, 787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps fail the first prong of the new Federal Circuit decision since they are not tied to a machine and can be performed without the use of a particular machine. Examiner has noted that claim 52 recites, "loading a computer program on a server," and the server is taken to be a machine, but this can be viewed as insignificant extra-solution activity, since the method is primarily directed to configuring rules and inputting criteria, which could be performed with pen and paper, or purely as a series of mental steps. Applicant's method steps fail the second prong of the new Federal Circuit decision since they do not transform underlying subject matter to a different state or thing. Thus, claims 49-56 are non-statutory since they may be performed largely within the human mind.

END NEW GROUNDS OF REJECTION

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,564,208	Littlefield et al.	5-2003
6,801,906	Bates et al.	10-2004
7,110,993	Soulanille	9-2006
2001/0003177	Schena et al.	6-2001
2002/0010015	Acres	1-2002
2003/0093482	Watanabe et al.	5-2003
2003/0177076	Might et al.	09-2003
2004/0167845	Corn et al.	8-2004
2004/0186769	Mangold et al.	9-2004
2006/0190328	Singh et al.	8-2006

Anon., "Google Comes out Ahead," Link-up, Vol. 17, No. 5, pp. 1, 12, Sep/Oct 2000.

Mahanta V., et al., "BT Dotcom," Business Today (India), p. 72, April 7, 2001.

Weidlich, T., "Search Engine Marketing Revving up," Catalog Age, Vol. 19, No. 12, pp. S3, S13+, November 2002.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

NEW GROUND(S) OF REJECTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on the instant application, paragraphs 153-155 and 195 in particular, the "system" of claims 1-37 can reasonably be interpreted as pure software, and software per se is not a process, machine, manufacture, or composition of matter, and therefore not patentable.

Claim 48 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on the instant application, paragraphs 153-155 and 195 in particular, the "system" of claim 48 can reasonably be interpreted as pure software, and software per se is not a process, machine, manufacture, or composition of matter, and therefore not patentable.

Claims 49-56 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780, 787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the

method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps fail the first prong of the new Federal Circuit decision since they are not tied to a machine and can be performed without the use of a particular machine. Examiner has noted that claim 52 recites, "loading a computer program on a server," and the server is taken to be a machine, but this can be viewed as insignificant extra-solution activity, since the method is primarily directed to configuring rules and inputting criteria, which could be performed with pen and paper, or purely as a series of mental steps. Applicant's method steps fail the second prong of the new Federal Circuit decision since they do not transform underlying subject matter to a different state or thing. Thus, claims 49-56 are non-statutory since they may be performed largely within the human mind.

END NEW GROUNDS OF REJECTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-37

Claims 1, 4, 5, 6, 10, 13, 14, 17, 18, 22, 23, 26, 27, 31, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) in view of Bates et al. (U.S. Patent 6,801,906). As per claim 1, Soulanille discloses an information distribution system, comprising: a user subsystem, said user subsystem providing for a request and a response, wherein said user subsystem provides for receiving said request and providing said response (Abstract; column 8, line 59, through column 9, line 6); a listing subsystem, said listing subsystem providing for a plurality of listings, wherein at least a subset of said listings are included in said response (Abstract; column 9, lines 7-20); and an administrative subsystem, said administrative subsystem providing for a tier, wherein said administrative subsystem selectively identifies two or more listings within said response for inclusion in said tier, wherein said listings within said tier are ordered in accordance with at least one of: (a) a random heuristic; (b) a weighted random heuristic; and (c) a placement heuristic not applied to all of the listings in said response (Abstract; column 9, lines 7-20; column 21, line 59, through column 22, line 50). Soulanille does not disclose a plurality of groups, wherein each said listing in the response is associated with at least one said group, each said group being determined at least in part according to the request, but Bates discloses an

information distribution system including a plurality of groups, wherein each listing in the response to a search request is associated with at least one said group, each said group being determined at least in part according to the request (Abstract; column 3, lines 18-45). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to include such a plurality of groups, for at least the stated advantage of concentrating on material which is new (Bates, column 1, line 65, through column 2, line 14).

As per claim 4, Soulanille discloses a plurality of tiers (Abstract; column 9, lines 7-20; column 16, line 57, through column 17, line 23; column 21, line 59, through column 22, line 50; Figure 7). (The paid listings from advertisers are regarded as one tier; the unpaid listings following them as a second tier.)

As per claim 5, Soulanille discloses that said listings within each tier are ordered in accordance with at least one of: (a) a random heuristic; (b) a weighted random heuristic; and (c) a placement heuristic (*ibid.*, as cited in claim 4).

As per claim 6, Soulanille discloses that each listing in said response is included in one of said plurality of tiers (*ibid.*, as cited in claim 4).

As per claim 10, the listings belonging to the same tier could easily belong to the same group, if, for example, the highest priority group in Bates filled the tier, or the higher priority groups in Bates produced no results, leaving the tier to be filled by the lowest priority group.

As per claim 13, Soulanille discloses a plurality of payment type attributes, wherein each said listing in said response is associated with at least one payment type attribute (Figure 7; column 16, line 57, through column 17, line 23).

As per claim 14, Soulanille discloses that each said listing in said tier shares the payment type attribute (Figure 7; column 16, line 57, through column 17, line 23).

As per claim 17, in the system of Soulanille, different users, or the same user, can make different search requests, and receive different responses (implied throughout, e.g., column 8, line 59, through column 9, line 20), and Soulanille discloses a first response including a tier of paid listings (Figure 7; column 16, line 57, through column 17, line 23; column 21, line 59, through column 22, line 50). Soulanille does not disclose a second response not including a tier of paid listings, but in the case of someone requesting results on a search term for which no advertiser had bid, such a tier would be absent, and presumably only unpaid listings (as disclosed in column 17, lines 15-23) would be displayed. It is further noted that a second response, responding to a different request, even if it did include a tier of paid listings, would not include the same set of paid listings, and in that sense, would not include "said tier."

As per claim 18, given the ability of users in the system of Soulanille to enter different search requests, searching on different search terms, such first and second request corresponding to first and second results follow.

As per claim 22, Soulanille discloses a position adjustment factor wherein at least one listing includes said position adjustment factor, **as per claim 23**, at least one listing

that includes the position adjustment factor being included in the tier (column 21, line 51, through column 22, line 50).

As per claim 26, Soulanille discloses a plurality of tiers and a means for selecting a category (Figure 7; column 16, line 57, through column 17, line 23; column 21, line 59, through column 22, line 50), and a plurality of sponsors who may be national sponsors (ibid.; Figure 7 shows online merchants whose reach appears to be national if not international), as well as a common category, in a sense, shared by the sponsors (ibid., the category being zip drives). Soulanille does not expressly disclose that the response is comprised entirely of listings associated with the group of national sponsors sharing the common category, because in Figure 7, not all of the listings are sponsored listings, but Soulanille discloses, "Preferably, unpaid listings are displayed if there are an insufficient number of listings to fill the 40 slots in a search results page," (column 17, lines 15-17), implying that when there was a sufficient number of paid listings, only paid, sponsored listings would be displayed.

As per claim 27, Soulanille discloses a tier including three listings (Figure 7).

As per claim 31, Soulanille discloses a per-hit fee, wherein at least one listing in the response is associated with the per-hit fee (column 11, lines 54-67; column 16, line 57, through column 17, line 23; column 19, line 53, through column 20, line 13; column 21, line 51, through column 22, line 50; Figure 7).

As per claim 36, Soulanille discloses a category key word, a request including the category key word (Figure 7).

Claims 2 and 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille and Bates as applied to claim 1 above, and further in view of Weidlich ("Search Engine Marketing Revving up"). As per claim 2, Soulanille discloses a plurality of priority metrics (column 21, line 59, through column 22, line 50), but does not expressly disclose that the administrative subsystem uses at least some (and more than one) of the priority metrics (together) to selectively identify the listings for inclusion in the tier. However, Weidlich teaches using several priority metrics together to selectively identify listings for inclusion in a tier of search results (especially paragraph beginning, "True search engines use software robots"). Hence, doing this would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention, for the obvious advantage of taking multiple relevant factors into account in assembling listings for the tier.

As per claim 3, Soulanille discloses a plurality of rankings, wherein the administrative subsystem uses said rankings to selectively identify the subset of listings for inclusion in the tier (Figure 7; column 16, line 57, through column 17, line 23; column 21, line 51, through column 22, line 50).

Claims 7, 8, 9, 11, 12, 15, 19, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) and Bates et al. (U.S. Patent 6,801,906) as applied to claim 1 above (and as applied to claim 36 above in the case of claim 37), and further in view of Might et al. (U.S. Patent Application Publication 2003/0177076). As per claim 7, Soulanille discloses a category selection (near the top of Figure 7), but does not expressly disclose that the request includes the catalog

selection, and that the selective identification of the subset of listings is influenced by said category selection (although this could be regarded as implied, because why else have a category selection feature in the webpage?), but Might teaches identifying a subset of listings based on a category selection (paragraphs 19 and 27). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the request to include the catalog selection, and for the selective identification of the subset of listings to be influenced by said category selection, for the obvious advantage of finding businesses selling desired products or services.

As per claim 8, Soulanille discloses a geography selection (near the top of Figure 7), but does not expressly disclose that the selective identification of the subset of listings is influenced by said geography selection (although this could be regarded as implied, because why else have a geography selection feature in the webpage?), but Might teaches identifying a subset of listings based on a geography selection (paragraphs 19 and 27). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the selective identification of the subset of listings to be influenced by said geography selection, for the obvious advantage of finding conveniently located businesses selling desired products or services.

As per claim 9, this is at least as obvious as claim 7, for the reasons set forth above in regard to claim 7.

As per claim 11, Soulanille does not disclose a plurality of geography attributes and a plurality of category attributes, wherein each said listing in the response is associated with at least one said geography attribute and at least one said category attribute (although Figure 7 in Soulanille shows means for selecting at least one said geography attribute and at least one said category attribute), but Might teaches associating listings in a response with geography attributes and/or category attributes (paragraphs 19 and 27). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for each said listing to be associated with at least one said geography attribute and at least one said category attribute, for the obvious advantage of finding businesses conveniently located and selling desired products or services.

As per claim 12, Might likewise teaches that listings share geography and/or category attributes (paragraphs 19 and 27). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for each listing in the tier to share said geography attribute and said category attribute, for the obvious advantage of finding businesses conveniently located and selling desired products or services.

As per claim 15, Soulanille discloses a category selection and a category key word, and wherein a request includes a category key word (Figure 7), although Soulanille does not expressly disclose that the request also includes the category selection; however, Might teaches a request including a category selection, influencing the listings to be included in the response (paragraphs 19 and 27). Hence, it would

have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention, for the obvious advantage of finding businesses selling desired products or services.

As per claim 19, Soulanille provides for (b) a national request (Figure 7; column 16, line 51, through column 17, line 23). Might teaches using category and geographic area to constrain requests, but constraint by geographic area is optional, so if it is not used, there is a national tier (paragraphs 19 and 27); thus, the listings are associated with a national tier in Soulanille and in Might. Might further teaches the national tier including multiple levels of tiers by category (paragraph 27). Soulanille shows first, second, and third responses (Figure 7), if one regards each listing as a response. If not, Soulanille discloses first and second responses (column 9, lines 7-20), and duplication of known features for multiple effect is held to be within the level of one of ordinary skill in the relevant art (*St. Regis Paper Co. vs. Bemis Co.*, 193 USPQ 8, 11; 549 F.2d 833 [7th Cir. 1977]; *In re Harza*, 124 USPQ 378, 380; 274 F.2d 669 [CCPA 1960]). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the plurality of responses to include a first, a second, and a third response, for the obvious advantage of grouping listings according to paid status, categorization, presence of keywords, etc., to assist users in finding desired listings, and profiting from providing the service.

As per claim 37, Soulanille discloses a category selection (Figure 7), although Soulanille does not expressly disclose that the request also includes the category selection; however, Might teaches a request including a category selection (paragraphs

19 and 27). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the request to include a category selection, for the obvious advantage of finding businesses selling desired products or services.

Claims 16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) and Bates et al. (U.S. Patent 6,801,906) as applied to claim 1 above, and further in view of Corn et al. (U.S. Patent Application Publication 2004/0167845). As per claim 16, Soulanille discloses a plurality of per-hit fees (e.g., Figure 7; column 16, line 57, through column 17, line 23). Soulanille does not expressly disclose that there is a minimum bid amount and all listings within the tier are associated with per-hit fees that exceed said minimum bid amount (although the example of Figure 7, where all listings in the tier are associated with per-hit fees that exceed an apparent minimum of \$0.01, is highly suggestive), but Corn teaches a minimum bid amount, such that listings would all exceed the minimum bid amount (Abstract; paragraphs 6-10). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to have such a minimum bid amount, for the stated advantages of increasing revenue, and better enabling a commercial search marketplace to represent multiple markets.

As per claim 24, Soulanille discloses a plurality of fees and a minimum fee, at least in the sense that no fee shown is smaller than the minimum of \$0.01 per hit (Figure 7; column 16, line 57, through column 17, line 23). Soulanille further discloses, "Preferably, unpaid listings are displayed if there are an insufficient number of listings to

fill the 40 slots in a search results page," (column 17, lines 15-17), implying that if there are a sufficient number of listings, each listing may be associated with a fee. Corn teaches a minimum bid amount, such that listings would all exceed the minimum bid amount (Abstract; paragraphs 6-10). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to have such a minimum fee, for the stated advantages of increasing revenue, and better enabling a commercial search marketplace to represent multiple markets.

Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) and Bates et al. (U.S. Patent 6,801,906) as applied to claim 1 above, and further in view of Littlefield et al. (U.S. Patent 6,564,208). As per claim 20, Soulanille does not disclose an enhanced display format, wherein at least one said listing in said response includes said enhanced display format, but Littlefield teaches enhanced display formats, wherein at least one listing in a response includes the enhanced display format (column 3, line 58, through column 4, line 20). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention, for the stated advantages of enticing search engine users to select the search results with enhanced display formats, and profiting from fees for such enhanced displays.

As per claim 21, given listings with an enhanced display format, it would be obvious for such listings to be in the tier, the reasons set forth above in regard to claim 20 being applicable.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) and Bates et al. (U.S. Patent 6,801,906) as applied to claim 1 above, and further in view of Singh et al. (U.S. Patent Application Publication 2006/0190328). Soulanille discloses a per-hit fee type, a plurality of per-hit fee values, wherein at least two listings in a response are associated with the per-hit fee type, and wherein each listing associated with the per-hit fee type is associated with at least one per-hit fee value (Figure 7; column 16, line 57, through column 17, line 23; column 21, line 59, through column 22, line 50), but Soulanille does not expressly disclose that there is a minimum bid increment, and that all per-hit fee values are in accordance with the minimum bid increment (although the listings in Figure 7 appear to be in increments of \$0.01 bid per hit). However, it is well known for auctions to have minimum bid increments, as taught, for example, by Singh (paragraph 73). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to include a minimum bid increment, and have all per-hit fee values be in accordance with the minimum bid increment, for the obvious advantages of increasing the amounts paid as per-hit fees, and avoiding the difficulties of having to deal with tiny fractional payments.

Claims 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) and Bates et al. (U.S. Patent 6,801,906) as applied to claim 1 above, and further in view of official notice. As per claim 28, Soulanille discloses a plurality of tiers, and a plurality of tier processing rules, wherein the number of tiers, it is implied, can differ according to whether there be a sufficient

number of paid listings (Figure 7; column 16, line 57, through column 17, line 23; column 21, line 59, through column 22, line 50; see reasoning set forth above with regard to claim 26), and in the system of Soulanille, different users, or the same user, can make different search requests, and receive different responses (implied throughout, e.g., column 8, line 59, through column 9, line 20). Soulanille does not expressly disclose that the tier processing rules differ for different search requests, but official notice is taken that it is well known to apply different known variations of a technique in different cases; hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to apply different disclosed tier processing rules for different search requests, for such obvious advantages as testing to determine which rules worked best, or applying the set of rules either specifically requested in a particular case, or believed to be most suitable to the circumstances.

As per claim 29, Soulanille discloses an administrator interface (for example, column lines 9-33), but does not disclose that the administrator interface provides for modifying the tier processing rules. However, given the plurality of tier processing rules disclosed by Soulanille, and the application of different processing rules to different requests, as found obvious with regard to claim 28 above, this is held to be obvious, for the motive of accomplishing the application of preferred different rules.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) and Bates et al. (U.S. Patent 6,801,906) as applied to claim 1 above, and further in view of Schena et al. (U.S. Patent Application

Publication 2001/0003177). A user of Soulanille's system would have to have some location, and Soulanille's disclosure of a "What City" feature (Figure 7) implies including a location of the user as part of a request, but Soulanille does not disclose that the system automatically includes the user location as part of a request. However, it is well known to automatically include a user location as part of a search request, as taught by Schena (e.g., paragraphs 10, 11, 52, 53, and 54). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the system to automatically include the user location as part of the search request, for the obvious advantage of finding potential sellers convenient to the user's location, as in Schena.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) and Bates et al. (U.S. Patent 6,801,906) as applied to claim 31 above, and further in view of Mangold et al. (U.S. Patent Application Publication 2004/0186769). Soulanille does not disclose a variable per-hit fee, but Mangold discloses variable per-hit fees (Abstract; paragraphs 5 and 25). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the per-hit fee to be a variable per-hit fee, for the stated advantage of charging according to the user's location, and thus his presumed likelihood of buying from the advertiser.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993), Bates et al. (U.S. Patent 6,801,906), and Mangold et al. (U.S. Patent Application Publication 2004/0186769) as applied to claim

32 above, and further in view of Mahanta et al. ("BT Dotcom"). Soulanille discloses that the system comprises a number of hits and a time in which to measure said number of hits (e.g., column 19, line 53, through column 20, line 13), but does not disclose that the number of hits and time in which to measure said number of hits influence a variable per-hit fee, nor does Mangold; but it is well known for a number of hits or period of time to influence a per-hit fee, as taught in Mahanta (paragraph beginning, "E-tailers are in for a reality check, too"). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the number of hits or period of time to influence the variable per-hit fee, for such obvious advantages as charging more during times of the year when advertising is more in demand, or as in Mahanta, assuring the usefulness of a site by requiring a minimum number of impressions or click-throughs.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) and Bates et al. (U.S. Patent 6,801,906) as applied to claim 31 above, and further in view of Acres (U.S. Patent Application Publication 2002/0010015). Soulanille does not disclose a variable per-hit fee, but Acres discloses variable per-hit fees (paragraph 6). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the per-hit fee to be a variable per-hit fee for at least the stated advantage of charging in accordance with the demographic value of a user.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993), Bates et al. (U.S. Patent 6,801,906), and Acres

(U.S. Patent Application Publication 2002/0010015) as applied to claim 32 above, and further in view of Mahanta et al. ("BT Dotcom"). Soulanille discloses that the system comprises a number of hits and a time in which to measure said number of hits (e.g., column 19, line 53, through column 20, line 13), but does not disclose that the number of hits and time in which to measure said number of hits influence a variable per-hit fee, nor does Acres; but it is well known for a number of hits or period of time to influence a per-hit fee, as taught in Mahanta (paragraph beginning, "E-tailers are in for a reality check, too"). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the number of hits or period of time to influence the variable per-hit fee, for such obvious advantages as charging more during times of the year when advertising is more in demand, or as in Mahanta, assuring the usefulness of a site by requiring a minimum number of impressions or click-throughs.

Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) and Bates et al. (U.S. Patent 6,801,906) as applied to claim 1 above, and further in view of Acres (U.S. Patent Application Publication 2002/0010015). As per claim 34, Soulanille does not disclose a plurality of per-hit fee types, but a plurality of per-hit fee types are well known, as taught, for example, by Acres (paragraphs 4, 5, and 6). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the system to comprise a plurality of per-hit fee types, for the obvious advantage of arranging fee types (flat payment per hit, commission on sales, fee depending on user

demographics, etc.) most suitable to the circumstances, and accepted as most satisfactory to the advertiser and the search engine owner.

As per claim 35, the plurality of listings in Soulanille necessarily includes a first listing (e.g., as in Figure 7, or column 22, lines 19-33), and if there are a number of per-hit fee types, e.g., payment of a flat fee plus a commission on sales, these could all be associated with the first listing as much as with any other listing. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the first listing to be associated with the more than one per-hit fee type, for the obvious advantage of profiting from different fee types, and in particular because different fee types would add to the effective value of a bid, and thus the incentive to list it first, e.g., a bid of \$0.08 per click plus 1% of resulting sales would be more valuable than a bid of \$0.08 per click.

Claims 38-47

Claims 38, 39, 40, 41, 42, 44, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) in view of the anonymous article, "Google Comes out ahead," and Bates et al. (U.S. Patent 6,801,906). As per claim 38, Soulanille discloses a system for distributing information, comprising: a depository of information, said depository of information including a plurality of listings (Abstract; Figure 1; column 7, line 4, through column 8, line 3); a server, said server including a request from a user, a response, a plurality of tiers, and a plurality of administrative rules, said plurality of administrative rules including a plurality of placement heuristics response (Abstract; column 9, lines 7-20; column 16, line 57,

through column 17, line 23; column 21, line 59, through column 22, line 50; Figure 7; the paid listings from advertisers are regarded as one tier, the unpaid listings following them as a second tier); wherein said server is configured to generate said response from said request by accessing the depository of information and said administrative rules (column 7, lines 15-59; column 8, lines 19-26; column 16, line 57, through column 17, line 23; column 21, line 59, through column 22, line 50); wherein said administrative rules provide for identifying two or more listings in the response as belonging to a tier identified as belonging to a plurality of tiers; and wherein said administrative rules prioritize said listings within the tier using the plurality of placement heuristics (Abstract; column 16, line 57, through column 17, line 23; column 21, line 51, through column 22, line 50; Figure 7). Soulanille does not expressly disclose that the administrative rules also prioritize the listings within other tiers, such as the second tier of non-paid listings, although this might be considered inherent, on the grounds that the order of listings in the second tier would have to be selected somehow; but it is well known to prioritize listings in non-paid tiers returned by search engines (e.g., by apparent relevance to the search terms in a request, as is done by Google and others), as taught by "Google Comes out ahead" (whole article, especially Abstract and paragraph beginning "Google has become the search engine of choice"). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the administrative rules to prioritize listings within the plurality of tiers, for the stated advantage of putting the unpaid listings in a reasonable order, such as with those most likely to be relevant at the top.

Soulanille does not disclose a plurality of groups, wherein each said listing in the response is associated with at least one said group, each said group being determined at least in part according to the request, but Bates disclose an information distribution system including a plurality of groups, wherein each listing in the response to a search request is associated with at least one said group, each said group being determined at least in part according to the request (Abstract; column 3, lines 18-45). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to include such a plurality of groups, for at least the stated advantage of concentrating on material which is new (Bates, column 1, line 65, through column 2, line 14).

As per claim 39, Soulanille discloses a plurality of tiers including a first tier and a second tier, the plurality of placement heuristics including at least a first placement heuristic ordering listings within the first tier (*ibid.*, as applied to claim 38 above), and a second placement heuristic ordering the listings within the second tier is obvious as set forth above with regard to claim 38 above. If the first heuristic involves the amounts bid for paid listings, as in Soulanille, then the first placement heuristic cannot be identical to the second placement heuristic.

As per claim 40, Soulanille discloses that at least each listing in the first tier of the response is associated with at least one of the priority metrics (Figure 7; column 16, line 51, through column 17, line 23; column 21, line 51, through column 22, line 50). Given a second tier ordered on some basis (e.g., a measure of apparent relevance), it would

follow that each listing in the second tier of the response would also be associated with at least one of the priority metrics.

As per claim 41, Soulanille discloses that the priority metrics influence the administrative rules in selectively identifying listings for inclusion in the (first) tier (*ibid.*, as per claim 40, and especially column 22, lines 34-50).

As per claim 42, Soulanille discloses that the listings are selectively identified for inclusion in the (first) tier in accordance with priority metrics (*ibid.*, as per claim 40, and especially column 22, lines 34-50).

As per claim 44, Soulanille discloses a plurality of rankings, wherein each listing in the response may have can include at least one said ranking, wherein said listings can be ranked in accordance with priority metrics, and wherein the administrative subsystem uses the rankings to selectively identify listings for inclusion in a first tier (Figure 7; column 16, line 51, through column 17, line 23; column 21, line 51, through column 22, line 50).

As per claim 45, Soulanille discloses a plurality of listings with associated priority metrics, wherein random selection is employed to determine placement, with an increased probability, but not a certainty, of more favorable placement given to the listings with higher bids/priority metrics (Figure 7; column 16, line 51, through column 17, line 23; column 21, line 51, through column 22, line 50), which would in some cases result in a first listing having a higher priority metric and a second listing being given more favorable placement.

As per claim 46, Soulanille discloses a plurality of listings with associated per-hit fees, wherein random selection is employed to determine placement, with an increased probability, but not a certainty, of more favorable placement given to the listings with higher per-hit fees (Figure 7; column 16, line 51, through column 17, line 23; column 21, line 51, through column 22, line 50; see also column 19, line 53, through column 20, line 13), which would in some cases result in a first listing having a higher per-hit fee and a second listing being given more favorable placement.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993), the anonymous article, "Google Comes out ahead," and Bates et al. (U.S. Patent 6,801,906) as applied to claim 41 above, and further in view of Might et al. (U.S. Patent Application Publication 2003/0177076). Soulanille does not expressly disclose that the affiliations with said groups influence the administrative rules in selectively identifying listings for inclusion in a tier (although the "Select a Category" and "What City?" features in Figure 7 are highly suggestive; also, Bates's teaching regarding the ordering of results by groups can be interpreted as showing that affiliations with groups determine inclusion in a top [or other] tier), but Might teaches a plurality of groups, wherein listings are associated with at least one group, and wherein the affiliations with said groups influence the administrative rules in selectively identifying listings for inclusion in a response (paragraphs 19 and 27). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to have a plurality of groups, each said listing associated with at least one group, the affiliations with said groups influencing the

administrative rules in selectively identifying listings for inclusion in a tier, for the obvious advantage of finding businesses conveniently located and selling desired products or services.

Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) the anonymous article, "Google Comes out ahead," and Bates et al. (U.S. Patent 6,801,906) as applied to claim 38 above, and further in view of Littlefield et al. (U.S. Patent 6,564,208). Soulanille discloses a position adjustment factor wherein at least one listing is associated with said position adjustment factor (column 21, line 51, through column 22, line 50). Soulanille does not disclose an enhanced display format, wherein at least one said listing in said response includes said enhanced display format, but Littlefield teaches enhanced display formats, wherein at least one listing in a response includes the enhanced display format (column 3, line 58, through column 4, line 20). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention, for the stated advantages of enticing search engine users to select the search results with enhanced display formats, and profiting from fees for such enhanced displays.

Claim 48

Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) in view of Bates et al. (U.S. Patent 6,801,906). Soulanille discloses an information distribution system, comprising: a user subsystem, said user subsystem providing for a request from a user and a response, wherein said user subsystem provides for receiving said request and providing said response

(Abstract; column 8, line 59, through column 9, line 6); a listing subsystem, said listing subsystem proving for a plurality of listings, wherein at least a subset of said listings are included in said response (Abstract; column 9, lines 7-20); and an administrative subsystem, said administrative subsystem providing for a tier, wherein said administrative subsystem selectively identifies two or more listings within said response for inclusion in a tier, wherein said listings within said tier are ordered in accordance with at least one of: (a) a random heuristic; (b) a weighted random heuristic; and (c) a placement heuristic not applied to all of the listings in said response (Abstract; column 9, lines 7-20; column 16, line 57, through column 17, line 23; column 21, line 59, through column 22, line 50; Figure 7). The paid listings from advertisers are regarded as one tier, the unpaid listings following them as a second tier. Soulanille does not disclose a plurality of groups, wherein each said listing in the response is associated with at least one said group, each said group being determined at least in part according to the request, but Bates disclose an information distribution system including a plurality of groups, wherein each listing in the response to a search request is associated with at least one said group, each said group being determined at least in part according to the request (Abstract; column 3, lines 18-45). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to include such a plurality of groups, for at least the stated advantage of concentrating on material which is new (Bates, column 1, line 65, through column 2, line 14).

Claims 49-56

Claims 49, 52, 53, 54, 55, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993) in view of Watanabe et al. (U.S. Patent Application Publication 2003/0093482) and Bates et al. (U.S. Patent 6,801,906). As per claim 49, Soulanille discloses configuring a plurality of administrative rules to organize a plurality of listings within a response into at least one tier based on a plurality of tier criteria, wherein the administrative rules include a tier placement heuristic for ordering listings within the tier, wherein not all listings within the response belong to the tier (Abstract; Figure 7; column 16, line 51, through column 17, line 23; column 21, line 51, through column 22, line 50). Soulanille does not expressly disclose inputting the tier criteria to define the number of tiers in the response and number of listings within the tiers, but as one or more computers apply the administrative rules, including a number of tiers in the response and number of listings within at least one tier (*ibid.*; column 7, lines 37-59; column 8, lines 19-26), and it is well known to input programs, files, and particular criteria into computers, as taught, for example, in Watanabe (paragraphs 57 and 58), it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to input the tier criteria, for the obvious advantage of causing the computer to carry out the desired procedures.

Soulanille does not disclose a plurality of groups, wherein each said listing in the response is associated with at least one said group, each said group being determined at least in part according to the request, but Bates disclose an information distribution system including a plurality of groups, wherein each listing in the response to a search

request is associated with at least one said group, each said group being determined at least in part according to the request (Abstract; column 3, lines 18-45). Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to include such a plurality of groups, for at least the stated advantage of concentrating on material which is new (Bates, column 1, line 65, through column 2, line 14).

As per claim 52, Soulanille discloses a computer automatically applying rules without human intervention (column 8, lines 19-26), making it obvious to load the necessary computer program, as set forth above with regard to claim 49.

As per claim 53, Soulanille discloses that the administrative rules include a priority metric calculation, wherein the priority metric calculation influences the positioning of said listings in the response (Figure 7; column 16, line 51, through column 17, line 23; column 21, line 51, through column 22, line 50).

As per claim 54, Soulanille discloses that listings are selectively placed into one of a plurality of tiers in accordance with the priority metric calculations associated with the listings (Figure 7; column 16, line 51, through column 17, line 23; column 21, line 51, through column 22, line 50).

As per claim 55, Soulanille discloses that the administrative rules can provide that listings belonging to the same tier are ordered in a random fashion (column 21, line 51, through column 22, line 50).

As per claim 56, Soulanille discloses that the administrative rules can provide that listings belonging to the same tier are ordered in a random weighted fashion that is

influenced by the corresponding priority metrics (column 21, line 51, through column 22, line 50).

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993), Watanabe et al. (U.S. Patent Application Publication 2003/0093482) and Bates et al. (U.S. Patent 6,801,906) as applied to claim 49 above, and further in view of official notice. Soulanille discloses multiple types of placement heuristics (column 16, line 51, through column 17, line 23; column 21, line 51, through column 22, line 50), but does not disclose associating a particular type of placement heuristic to coincide with a particular type of request. However, official notice is taken that it is well known to match particular kinds of answers, or particular procedures, to particular kinds of requests. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to associate a particular type of placement heuristic to coincide with a particular type of request, for the obvious advantage of placing listings likely to be of greater interest to the user, or value to advertisers, in more prominent positions (an example would be using placement heuristics which involve geographical categorization in response to search request which include geographical limitations or preferences).

Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soulanille et al. (U.S. Patent 7,110,993), Watanabe et al. (U.S. Patent Application Publication 2003/0093482) and Bates et al. (U.S. Patent 6,801,906) as applied to claim 49 above, and further in view of Might et al. (U.S. Patent Application Publication 2003/0177076). Soulanille appears to provide for a plurality of request types, because

of the "Select a Category" and "What City" features in Figure 7, and Soulanille provides for (b) a national request constrained by name (Figure 7; column 16, line 51, through column 17, line 23; the name being a term like "zip drive"). Might teaches using category and geographic area to constrain requests (paragraphs 19 and 27), implying at least (a) a national request constrained by category and (c) a local request constrained by name. Hence, it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention for the system to provide for a plurality of request types including at least two of those listed, for the obvious advantage of finding conveniently located businesses selling desired products or services.

(10) Response to Argument

The question is whether the claimed invention as a whole would have been obvious to one of ordinary skill in the art, given the teachings of the various prior art references applied. Examiner maintains that it would have been obvious, based on those teachings, on proper motivation to combine those teachings, and on the ways in which applying the teachings of secondary references to modify the primary reference constitute using known, identified elements to obtain predictable results.

Regarding claim 1 in particular, where Bates is combined with Soulanille, Appellants' arguments are not commensurate with the scope of the claim. Soulanille discloses most elements of claim 1, including tiers of listings, although not groups of listings distinct from the tiers. Bates teaches groups of listings, meeting the remaining limitation of claim 1, which reads, "a plurality of groups, wherein each said listing in said

response is associated with at least one said group, each said group being determined at least in part according to said request.” [Emphasis added.] Appellants’ first argument is that the groups taught in Bates are pre-determined, and do not change regardless of the user’s search request. Examiner replies that Bates’s groups are not fully pre-determined, and do change according to the user’s search request. Bates distinguishes groups of listings according to whether the URL’s for listings are new since the last search, whether the URL’s have been previously visited, but have changed, whether the URL’s existed before, but have changed, and whether the URL’s have been previously visited, and have not changed (Abstract; column 2, lines 18-45). Thus, the listings depend in part on previous searches, and on what URL’s the user visited after his previous searches, but are also determined in part on the basis of a current search. If the user enters “widget” as a search term, he will get a list of URL’s relevant to “widget,” with the URL’s grouped as described, but this depends on “widget” being entered as a search request. If the user instead requests a search on “wadget,” he will receive a different set of URL’s, grouped differently according to previous searches, if any, on “wadget.”

Appellants next argue that Soulanille could not have been combined with Bates, because Soulanille teaches that listings within a tier are ordered in accordance with at least one of the heuristics recited in claim 1, while Bates teaches that URL’s and groups are sorted in order of priority. Appellants argue that listings could not have been ordered within tiers according to the heuristics recited in claim 1, and also according to groups. Examiner replies that the argument does not match the scope of the claims.

Claim 1 does not recite that the listings are ordered according to groups, but simply that the listings are associated with groups. If a search system merely assigned listings to groups for its own purposes, without ordering the listings presented to the user in accordance with the groups, or doing anything else to make the user aware of the existence of the groups, the relevant limitation of claim 1 would still be met. It may be that one could not simultaneously practice all elements of Soulanille and all elements of Bates, but such bodily incorporation is not a requirement for a valid finding of obviousness. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Appellants further argue that claim 10 is separately patentable, based on its recitation that listings belonging to the tier belong to the same group. Examiner rejected claim 10 on the grounds that the listings belonging to the same tier could easily belong to the same group if, for example, the highest priority group in Bates filled the tier, or in some other circumstances. Appellants argue, "Placement of all of the listings into one or the other priority group, for example, the highest or lowest priority group, would, in effect, be the same as not using Bates' priority groups at all." Examiner replies, first, the groups would still be used, even in the case of all displayed listings chancing to belong to a first group, and secondly, that the situation of Examiner's first example would not

require that all listings be placed in Bates's highest priority group, but that all listings in a first tier be in Bates's highest priority group. Soulanille discloses, for example, that non-paid listings can follow the paid advertiser listings on a search results page (column 9, lines 18-20). One could thus have a situation, where, as per Soulanille, there are ten paid listings (a first tier), followed by ten non-paid listings (a second tier). If all ten of the paid listings happened to be for URL's which were new since the last search (as per Bates; this could easily happen if the user's search was for products in a rapidly developing field, or for news articles and opinion columns regarding a swiftly developing crisis), then all of the listings in the first tier would belong to the same group. The second tier, of non-paid listings, might all belong to that group as well, or some second-tier listings might be old news, and belong to a different group. Other scenarios would also be possible, again resulting in all of the listings in at least one tier belonging to the same group.

While there is, as noted above, no limitation in claim 1, or in claim 10, that group membership has to have any connection with the ordering of listings, one could consistently combine ordering by group with ordering by tier. If, for example, there were ten paid listings in the first tier, all of them for URL's which were new since the last search, and then ten non-paid listings in the second tier, six of them for URL's which were new since the last search, and four of them for URL's which existed before and had not changed, one could incorporate the teaching of Bates into the system and method of Soulanille by displaying the first tier, and then the six new-group listings in

the second tier, and then the four old-group listings in the second tier. This would perfectly fit the limitation of claim 10.

Appellants next argue that claim 17 is separately patentable, noting that Examiner conceded that “Soulanille does not disclose a second response not including a tier of paid listings.” Examiner replies that if a user enters a search request which does not correspond to any terms for which anyone has bought the advertising rights, then there would not be a tier of paid listings. Appellant argues that Examiner cannot meet the burden of a prima facie case of obviousness by presuming that the prior art could include certain elements. Examiner replies that there is an important distinction: Examiner cannot establish a prima facie case of obviousness by presuming an element which there is no reason to suppose to have been present in the system described by a prior art document, but submits that he can properly presume a situation likely to arise from use of the prior art system as disclosed.

An analogy may clarify this distinction: If a patent applicant were to claim a tray for a waiter to carry drinks to a table, and include the limitation that there was a sponge rim around the perimeter of the tray for absorbing spilled drinks, a patent examiner could not presume this to have been present in a prior art tray when the prior art reference had no teaching of such a sponge device. However, if the prior art reference disclosed a tray large enough to carry up to six drinks to a table for six, and a patent applicant were to claim that there were two and only drinks on his tray, it would be reasonable to presume that there were sometimes two and only two drinks on the prior art tray, as a consequence of people visiting restaurants in pairs, or of only two people

among a larger group wanting drinks. Similarly, while Soulanille does not disclose a response not including a tier of paid listings, Soulanille does not teach or suggest any way of guaranteeing that there will be a sufficiency of advertisers, or any advertisers at all, interested in paying to give their listings prominence in the results provided for every possible search request. Perhaps no potential advertiser will think that a particular search term or set of terms is likely to lead to a purchase, or perhaps no potential advertiser will think of a particular term before it's entered as a search request, or perhaps no potential advertiser will think that a particular search engine is worth advertising on, at least at the fees for paid listings which the search engine charges. Thus, the situation of no paid listings could easily arise in the system disclosed by Soulanille.

A further consideration, set forth in the rejection of claim 17, and not addressed in Appellants' argument, is that even aside from the possibility of a response without paid listings, a second response, responding to a different search from that which triggered a first response, would generally not include the same set of paid listings as a first response, and would in that sense not include "said tier."

Appellants argue that claim 27 is separately patentable, based on its recitation that the tier includes three listings. Appellant notes that Soulanille's Figure 7 discloses seven paid listings and two unpaid listings. (Actually, there are only six paid listings, but that is a trifling point.) Examiner replies that the eight listings in Figure 7 do include three listings, although not only three. As the honorable members of the Board are surely well aware, there is an important distinction in patent claim language between

"includes" or "comprises" and "consists of"; hence, a tier which consists of eight listings includes three listings.

Appellants next address the rejection of claims 2 and 3 over Soulanille in view Bates and Weidlich, disputing the relevance of Weidlich. Weidlich teaches that search engines use spiders to crawl the Web, and in particular, teaches, "Each search engine uses a different algorithm to determine how relevant a Web page is to a user's query, assigning different weight to such factors as body text, links, and meta tags." Appellants argue that Weidlich lacks any teaching of an "administrative subsystem" to impact the functioning of other subsystems. Examiner replies that Soulanille discloses an administrative subsystem, as set forth in the rejection of claim 1, and not traversed by Appellants. It is not necessary that a secondary reference disclose details of the subsystems of which a search engine is comprised; it is sufficient that Weidlich teaches multiple factors for assigning weight to Web pages, and therefore selectively identifying Web pages for inclusion in search results. This constitutes teaching the claimed element, by a relevant reference that is analogous art -- Soulanille, Bates, and Weidlich all being concerned with search engines -- and with obvious motivation, as set forth, to make the combination.

Secondly, Appellants argue that Weidlich still fails to teach identifying the listings for inclusion in said tier. The foregoing argument applies; furthermore, Examiner replies that a search engine such as those taught by Weidlich necessarily presents search results in at least one tier, thus meeting that limitation.

Appellants next argue for the alleged non-obviousness of claims 28 and 29, concerning which official notice was taken. Soulanille, as cited in the rejection of claim 28, discloses a plurality of tiers and a plurality of tier processing rules, and discloses that different users, or the same user, can make different search requests, and receive different responses. Soulanille does not, as admitted, disclose that the tier processing rules differ for different search requests, but Examiner took untraversed official notice that it is well known to apply different variations of a technique in different cases. Appellants argue that merely because it is known to conduct experimentation would not have suggested that tier processing rules differ for different search requests. Examiner replies that claim 28 does not recite some particular technique of experimentation or variation, which might perhaps be patentable, but merely the result of some unspecified kind of experimentation or variation. Soulanille discloses a number of variants and possible embodiments of his invention; to take one example, in the context of Soulanille's disclosed weighted random placement of listings, Soulanille discloses, "This method can be adjusted along a continuum from the totally-random display ranking just described, to the strict deterministic bid ranking of the preferred embodiment, by varying one or more parameters of a suitable algorithm" (column 22, lines 14-18). Thus, if after processing a first request, the operator of Soulanille's system were to say, "This isn't getting as much business for our search engine as I'd like. Let's vary one or more parameters of our algorithm to use a different variation," and then process a second request differently, the limitations of claim 28 would be met.

Appellants argue for the allowability of claim 30, rejected as obvious in view of Soulanille, Bates, and Schena. Schena discloses, inter alia, including a user location as part of a search request, and finding potential sellers convenient to the user's location. Appellant argues against the combination on the ground that Schena is concerned with scanning print media from which machine-readable code is extracted; e.g., one would scan the barcode for a product, and receive information on suppliers for that product, including, in the relevant embodiment, information on one or more local suppliers near to the location of the scanning equipment. Appellant argues that neither Soulanille nor Bates is concerned with scanning "tangible object media," which is true, but insufficient to make the limitation non-obvious. Schena's method of determining the location of scanning equipment, by, for example, GPS, could equally be applied to the computer terminal or other device in which a user of the system of Soulanille enters his search request, thus automatically including user location in the search request.

The Supreme Court has ruled in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007) that the teaching, suggestion or motivation test should not be applied as a rigid and mandatory formula that limits obviousness analysis through a formalistic conception of the words "teaching," "suggestion," and "motivation" or by overemphasis on the importance of published articles and explicit content of issued patents, since market demand, rather than scientific literature, often drives design trends, and granting patent protection to advances that would occur "in the ordinary course" without real innovation retards progress and may, in the case of patents

combining previously known elements, deprive prior inventions of their value or utility (1385-1386).

To quote further from *KSR* (at 1386), “[R]igid application of preventative rules that deny fact finders recourse to common sense are neither necessary nor consistent with precedent.”

The Court also noted in the *KSR* decision, “[I]f there is design need or market pressure to solve [a] problem, and there are [a] finite number of identified, predictable solutions, [a] person of ordinary skill in art has good reason to pursue known options within his or her technical grasp, and if this leads to anticipated success, it is likely product of ordinary skill and common sense, not innovation.”

The particular application of this to claim 30 is that there are a finite number of identified, predictable solutions for determining user location, and a design need or market pressure to solve the problem of doing so, namely, recommending conveniently located merchants, rather than those far off. Automatically including the user’s location leads to anticipated success, and should thus be considered the product of ordinary skill and common sense, not patentable innovation.

Claim 33 stands as rejected in two different ways, and both rejections are traversed by Appellants. First, beginning on page 30 of the Appeal Brief, Appellants traverse the rejection of claim 33 based on Soulanille, Bates, Mangold and Mahanta (the “BT Dotcom” article). Claim 33 depends on claim 32, which recites variable per-hit fees; this stands as rejected based on Mangold, which Appellants do not traverse.

Claim 33 additionally recites a number of hits and a period of time in which to measure hits, the number and period of time influencing the per-hit fee. Appellants describe Examiner as relying on unsupported Official Notice, which is not accurate; Examiner does not rely on Official Notice at all in rejecting claim 33. Mahanta teaches that the fee for paid ads can be contingent on a minimum number of impressions or click-throughs, which means that if the minimum number of hits is not reached, there will be either no fee paid, or a reduced fee. Thus, the fee per hit depends on the number of hits, presumably within a period of time.

Beginning on page 32, Appellants traverse the rejection of claim 33 based on Soulanille, Bates, Acres and Mahanta. There is no need to repeat the immediately preceding description of the teaching of Mahanta; here, Appellants argue that Acres cannot be combined with Soulanille or Bates. Acres, as Appellants observe, disclose a system allowing users to play the game of reverse keno while visiting various websites. Examiner was not, however, concerned with the game of reverse keno so much as with what Acres teaches in paragraph 6 as background, viz. that advertisers are willing to pay more for advertisements whose appropriateness can be evaluated, and thus that user information is gathered, so that, in the example Acres gives, an ad for an automotive web site can be displayed to a 21 year old who has recently bought a car, rather than to a ten year old. As Appellants write, Acres is not concerned with search terms, but Examiner maintains that that is not necessary. In response to Appellants' arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of

references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Acres teaches charging higher per-hit fees to reach more desirable audiences, and thus teaches variable per-hit fees. This was properly held to be obvious even before *KSR*, and to quote again from the *KSR* decision, "[I]f there is design need or market pressure to solve [a] problem, and there are [a] finite number of identified, predictable solutions, [a] person of ordinary skill in art has good reason to pursue known options within his or her technical grasp, and if this leads to anticipated success, it is likely product of ordinary skill and common sense, not innovation." Charging variable hit fees is an identified, predictable solution to the problem of charging appropriate fees for advertising, which there is design need or market pressure to solve, and should be considered the product of ordinary skill and common sense, not patentable innovation.

Next, regarding claim 34, Appellants write on pages 33 and 34 that Acres cannot be combined with Soulanille and Bates, a point which Examiner has already addressed, and concerning which Examiner's response should be regarded as reiterated; Appellants also argue that Acres does not disclose a plurality of per-hit fee types, in response to which Examiner recommends reading paragraphs 4, 5, and 6 of Acres, especially paragraph 4. Acres expressly teaches that advertisers may pay displaying sites (a) for each time that a user accesses a web page of the displaying site that includes the advertisement, (b) an additional amount each time a user clicks through the advertisement to access a web page of the advertised web page, and (c) a referral fee

that is a percentage of the price of a purchase that resulted from the click through. Examiner submits that at least (b) and (c) are per-hit fees, and the two of them constitute a plurality.

Then, regarding claim 35, Appellants argue that there is no explicit teaching in Soulanille or Acres that the first listing is associated with more than one said per-hit fee type. Examiner replies that if it is obvious for listings in general to be associated with a plurality of per-hit fee types, and Acres makes this obvious, then it is obvious for the first listing in particular. Neither Soulanille nor Acres says anything to suggest that what is done for listings or advertisements in general cannot be, or should not be, or is not, done for the first listing in a set.

Regarding independent claim 38, which stands rejected over Soulanille, Bates, and the article, "Google Comes out Ahead," Appellants argue that it should be allowable for the same reasons as claim 1, to which Examiner reiterates his replies concerning claim 1, and Appellants further argue that it should not be considered obvious based on Soulanille and "Google Comes out Ahead" for said "administrative rules [to] provide for ordering said listings in said response." Examiner replies that it is obvious on several grounds. First, Soulanille discloses prioritizing listings within a tier of paid listings using a plurality of placement heuristics (Abstract; column 16, line 57, through column 17, line 23; column 21, line 51, through column 22, line 50; Figure 7), as set forth in the rejection. Secondly, while Soulanille does not expressly disclose that the administrative rules also prioritize the listings within other tiers, this could be considered inherent, on

the grounds that the order of listings in the second tier (non-paid listings) would have to be determined somehow. Thirdly, it is well known to prioritize listings in non-paid tiers returned by search engines, as taught by "Google Comes out Ahead." Appellants describe this article as making the conclusory statement that results returned by Google are "most useful and relevant," without any disclosure regarding "ordering listings included in said response." Examiner replies that Appellants are demonstrably mistaken about what the "Google Comes out Ahead" article teaches. It says, "Google has become the search engine of choice for many Web users due to its uncanny ability to consistently rank the most useful and relevant sites as highest on the list." Therefore, it definitely is concerned with ordering the listings included in responses.

Appellants next argue for the separate patentability of claims 45 and 46, each of which contains the limitation, "wherein said second listing is given a more favorable placement than said first listing," despite the first listing having a higher priority metric (claim 45) or a higher per-hit fee (claim 46) than the second listing. Soulanille, as Appellants admit, discloses a weighted random scheme, in which "the probability for the highest bidder to appear in the top spot of N displayed listings is greater than $1/N$ but less than unity, with similar probabilities for the other bidder ranks to land in various display ranks" (column 22, lines 7-18). Appellants make the astonishing argument that just because an event (listings of higher rank or priority appearing below those of lower rank or priority some of the time) is capable of occurring does not mean that Soulanille teaches or suggests that it occurs. Examiner replies that if the disclosure of Soulanille

is carried out exactly as Soulanille discloses, with a probability less than unity for the highest-fee listing to be given first place, than it would very much be expected to occur. To return to Examiner's earlier analogy, this is like arguing that a prior art disclosure of a tray enabling a waiter to carry from one to six drinks does not teach or suggest carrying two drinks on the tray, because there is no explicit teaching of that situation occurring.

Appellants further argue, "Soulanille's random scheme teaches away from the recitation 'wherein said second listing is given a more favorable placement,' because such 'more favorable placement' would destroy Soulanille's random scheme." Examiner finds this argument beyond astonishing; he believes that "high weirdness" is the term of art. First, Soulanille's (weighted) random scheme is described as resulting in higher-fee listings sometimes, but not always, receiving more favorable placement than lower-fee listings. It is precisely the nature of a random scheme that a second listing would sometimes receive more favorable placement, and a first listing would sometimes receive more favorable placement, and a third listing, or an Nth, would sometimes receive more favorable placement.

Next, on page 37 of the Appeal Brief, Appellants argue that independent claim 49 is patentable. This is a method claim for configuring the administrative rules, etc., for a system such as that recited in claim 1. Appellants argue against combining Watanabe, which is concerned with distributing information to people on a user's buddy list, with Soulanille. Examiner responds that the test is not whether one could or would be motivated to bodily incorporate the system of Watanabe into that of Soulanille.

Examiner merely used Watanabe as example of the well-known technique of inputting programs, files, and particular criteria into computers, something which Appellants surely cannot claim to have invented, and something which is well known and widely used to input many different kinds of programs, files, and criteria into computers. For example, Soulanille discloses, "This method can be adjusted along a continuum from the totally-random display ranking just described, to the strict deterministic bid ranking of the preferred embodiment, by varying one or more parameters of a suitable algorithm" (column 22, lines 14-18), which would require inputting information on how one wishes to vary the parameter(s). Some particular tier criteria might be novel, but merely inputting tier criteria in order to make the system operate cannot be.

The Supreme Court has ruled in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007) that the teaching, suggestion or motivation test should not be applied as a rigid and mandatory formula that limits obviousness analysis through a formalistic conception of the words "teaching," "suggestion," and "motivation" or by overemphasis on the importance of published articles and explicit content of issued patents, since market demand, rather than scientific literature, often drives design trends, and granting patent protection to advances that would occur "in the ordinary course" without real innovation retards progress and may, in the case of patents combining previously known elements, deprive prior inventions of their value or utility (1385-1386).

To quote further from *KSR* (at 1386), "[R]igid application of preventative rules that deny fact finders recourse to common sense are neither necessary nor consistent with precedent."

The Court also noted in the *KSR* decision, "[I]f there is design need or market pressure to solve [a] problem, and there are [a] finite number of identified, predictable solutions, [a] person of ordinary skill in art has good reason to pursue known options within his or her technical grasp, and if this leads to anticipated success, it is likely product of ordinary skill and common sense, not innovation."

Examiner submits that it is, in accordance with *KSR*, common sense to input the tier criteria that the system uses, since inputting requisite data, including parameters, into a computer is a known option within the technical grasp of a person of ordinary skill in the art, and an identified, predictable solution to the design need of causing the computer to carry out the desired procedures.

Penultimately, on pages 37, 38, and 39, Appellants argue for the separate patentability of claim 50. In making the rejection, Examiner took official notice that it is well known to match particular kinds of answers, or particular procedures, to particular requests, and Appellants did not properly traverse this taking of official notice. (In the Office Action Response of February 15, 2007 (not 2006), Appellants traversed certain takings of official notice, to which Examiner responded in the next Office Action by citing actual prior art to establish the facts for which official notice had been traversed; but Appellants did not expressly mention the taking of official notice in claim 50, still less

traverse, still less "specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art." (MPEP, 2144.03(C)). Therefore, Examiner was not obliged to find explicit support for the fact of which official notice was taken.

Appellants seek to dismiss as mere speculation Examiner's conclusion that, "it would have been obvious to one of ordinary skill in the art of electronic commerce at the time of applicant's invention to associate a particular type of placement heuristic to coincide with a particular type of request, for the obvious advantage of placing listings likely to be of greater interest to the user, or value to advertisers, in more prominent positions." Examiner replies that this is not mere speculation or unsupported conjecture, because the rejection of claim 50 includes an explicit example: "(an example would be using placement heuristics which involve geographical categorization in response to search request which include geographical limitations or preferences)."

Might et al. (U.S. Patent Application Publication 2003/0177076), which was relied upon in rejecting claims 8 and 11, among others, is explicit about optionally returning search results according to category and/or geography, depending on circumstances, and could have been applied to claim 50 if the taking of official notice had been properly traversed. Appellants, having presumably read the Office Action with some care, could scarcely have thought that Examiner's example of geographical categorization was merely the fruit of Examiner's own imagination. Thus, there is sound basis for the statement of motivation in Examiner's rejection of claim 50, and the rejection should be upheld.

Finally, on pages 39 and 40, Appellant argues for the patentability of various dependent claims, on the grounds that they depend from claims which, in Appellant's view, ought to be allowed. Appellant does not otherwise argue for the patentability of these dependent claims, so there is nothing to which to reply; if the independent claims should be allowed, then so should these dependent claims; while if the rejections of the independent claims are upheld, then these dependent claims should also remain rejected.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Nicholas D. Rosen/

Primary Examiner, Art Unit 3625

A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:

/Wynn W. Coggins/

Director, TC 3600

Conferees

/Matthew S Gart/

Supervisory Patent Examiner, Art Unit 3687

Vincent Millin /vm/
Appeals Conference Specialist